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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,968	04/15/2004	Lawrence C. Lee	ADNAS 04.002	8220
48008	7590	04/30/2009	EXAMINER	
KERR IP GROUP, LLC			JOLLEY, KIRSTEN	
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			ART UNIT	PAPER NUMBER
			1792	
			NOTIFICATION DATE	DELIVERY MODE
			04/30/2009	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/825,968	<b>Applicant(s)</b> LEE ET AL.	
	<b>Examiner</b> Kirsten C. Jolley	<b>Art Unit</b> 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) 34-36,38,40 and 44-53 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33,37,39,41-43,54 and 55 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/6/04, 9/16/04, 3/4/05</u> .                                 | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of Group I and species "b" in the reply filed on January 20, 2009 is acknowledged. The traversal is on the ground(s) that the three species identified by the Examiner merely represent when during the claimed authentication process the nucleic acid marker is introduced, and are not "mutually exclusive characteristics." This is not found persuasive because the claims to the different species recite the mutually exclusive characteristics of such species. The species are directed to adding the nucleic acid mixture during bale opening, or during knitting/weaving, or during dyeing operations. Each species recites limitations of adding the nucleic acid mixture during operations that the others do not, thus the species are mutually exclusive of one another.

The requirement is still deemed proper and is therefore made FINAL.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 2-5, 12-14, 19, 21-22, and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 2-5, 12-14, 19, 21-22, and 27 are vague and indefinite because they contain improper Markush language. The phrase "selected from a group consisting of ... or ..." should

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be changed to --selected from *the* group consisting of ... *and* ..." [emphasis added]. See MPEP 2173.05(h).

Additionally, claims 5, 14, and 22 recite the limitation "said plurality of products" in line 1. There is insufficient antecedent basis for this limitation in the claims because the claims from which they depend never introduce a *plurality* of products.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-33, 37, 39, 41-43, and 54-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rancien et al. (US 2004/0063117).

With respect to independent claims 1, 11, 20, Rancien et al. discloses a method for authenticating an object, particularly for authenticating paper intended for serving as the medium of works of art or other documents of value (paragraph [0005]). Rancien et al. teaches the steps of selecting a unique nucleic acid marker having a specific length and a specific sequence; selecting a media that causes said marker to adhere to a fibrous material (paragraph [0033]); mixing said media with said marker to generate a nucleic acid marker mixture; applying said nucleic acid marker mixture to fibers (paragraph [0018]); generating a marked fibrous material by causing said nucleic acid marker mixture to adhere to said fibers; producing a paper material by using one or more marked fibers (paragraph [0043]); and authenticating the paper material by

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detecting said unique nucleic acid marker in said marked fibrous material, said nucleic acid detected with primers particular to said unique nucleic acid having said specific length and said specific sequence (paragraph [0036]). It is noted that Rancien et al. is directed to making a paper, and lacks a teaching of forming a textile material from the marked fibers. However, Rancien et al. teaches use of its invention to make “paper for serving as the medium of works of art,” and the Examiner takes Official notice that the medium of works of art is often on canvas. Canvas is a textile material that is similarly formed from fibers. It is the Examiner’s position that one having ordinary skill in the art would have been motivated to similarly form a canvas material instead of paper with the marked fibers produced by the process of Rancien et al. upon seeing Rancien et al.’s teaching that it is desirable to authenticate the medium of works of art. Further, one would expect similar results because the manufacture of a textile and paper would both be formed from marked fibers, and the only difference is a subsequent knitting/weaving process in place of a mass papermaking process.

As to claims 2-3, Rancien et al. discloses use of polyurethane as the media (paragraph [0033]), which is a polymer.

As to independent claim 11 and claim 12, Rancien et al. teaches that the marker mixture may be applied to the fibers after they are made by a dyeing process (paragraph [0018]).

As to claims 4-5, 13-14, 21-22, it is noted that a canvas used for painting is a product manufactured from fibrous materials, and may be considered a home or consumer product.

As to claims 6-7, 15-16, 23-24, Rancien et al. teaches use of DNA as the nucleic acid. However, it would have been obvious to have similarly used RNA since Rancien et al. is

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generally directed to the use of nucleic acid and RNA is commonly known to be the other nucleic acid (paragraph [0042]).

As to claims 8-10, 17-19, 25-27, Rancien et al. teaches that the nucleic acid marker of its invention helps to identify and authenticate an object. It would have been well within the skill of an ordinary artisan to have associated the DNA marker with a plurality of product information such as the product's origin or supply chain or manufacturing information as the purpose for the DNA marker.

As to independent claim 37, Rancien et al. teaches spraying in paragraph [0079], and application on fibers in paragraphs [0018]-[0019]. As to claims 39 and 41, Rancien et al. generally discloses that the DNA marker fluid may be applied at any stage during production of a fiber or after a fiber has been made, as well as during the paper-making step. It would have similarly been obvious to have sprayed the DNA marker fluid during a knitting/weaving process step in the process of making a textile material, as discussed above, with the expectation of successful results since Rancien et al. generally discloses addition of the marker fluid at any point during production. As to claim 42, Rancien et al. is silent with respect to the use of rayon as the fiber. However it would have been obvious for one having ordinary skill in the art to have selected other fibrous materials for the production of a canvas material as a matter of design preference with the expectation of similar and successful results.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Sheu et al. (US 2002/0187263), Sheu et al. (US 7,115,301), WO 03/080931 A1, WO 90/14441 A1, Lebacq (US 5,139,812), Kosak et al. (US 2005/0214532), Tooth (US 4,183,989), and Hoshino et al. (US 5,602,381) are cited to demonstrate the state of the prior art with respect to Applicant's claimed invention.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kirsten C. Jolley whose telephone number is 571-272-1421. The examiner can normally be reached on Monday to Tuesday and Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kirsten C Jolley/  
Primary Examiner, Art Unit 1792

kcj